2. Gravity control is possible with a five per cent solution of novocain crystals in spinal fluid, without the addition of any other substance.

3. With this technique the Trendelenburg position is not only not indicated; it is definitely contraindicated, except as used to increase the

height of anesthesia.

4. With this technique, the novocain is not all "fixed" by the nerve tissue in contact with it, in ten minutes, as is generally taught. It is possible to shift the level of anesthesia after fifteen or twenty minutes in most cases.

5. Untoward symptoms can be avoided by holding the upper limit of anesthesia to the costal

margin.

6. Two hundred milligrams of novocain is a safe dose in anyone not having an idiosyncrasy toward it, and gives a desirable length to the anesthesia.

SUMMARY

- 1. Reasons for devising Harborview Hospital technique.
 - 2. Brief history of spinal anesthesia.
- 3. Harborview Hospital technique presented in detail.
 - 4. Records, and what they show.
 - 5. Conclusions.

1409 Medical and Dental Building.

PHYSICAL THERAPY IN CALIFORNIA*

A SPECIAL COMMITTEE REPORT

A SPECIAL Committee on Physio-Therapy was appointed by the Council of the California Medical Association in September, 1932. The committee consisted of Doctors Charles L. Lowman, Howard Naffziger, Rodney F. Atsatt, H. Leslie Langnecker, and John Severy Hibben (chairman).†

SCOPE OF PROGRAM

In outlining its work, the committee decided

- 1. To survey the practice of physical therapy from the standpoint of:
 - (a) Education—graduate and undergraduate;
- (b) Practice—by general practitioners, or institutions, and by unlicensed technicians.
- 2. To submit a report in writing of their findings, with recommendations, at the next regular meeting of the California Medical Association.

Among the reasons advanced for creating such a committee was the suggestion that many members of the medical profession do not fully understand that physical therapy agents are a part of the regular professional armamentarium in the practice of medicine and surgery; that those practicing physical therapy should have opportunities to receive ample training and postgraduate instruction, and that the instruction should be given

by qualified physicians or by teaching institutions, not by salesmen of manufacturers or hired lecturers. It was recognized that while competent technicians should be used to carry out therapeutic measures, the responsibility for medical judgment in every case, from day to day, rests squarely on the shoulders of the practicing physician. Whenever a physician cannot himself intimately supervise the indicated measures, he should, of course, refer his patient to a physician trained in physical therapy, or to a hospital department under a physician's control.

QUESTIONNAIRE RESPONSES

Questionnaires were sent to all of the medical colleges, hospitals, and county medical societies in the state, with the following results:

1. Survey

- (a) Of the four medical colleges in California, only two offer undergraduate instruction in physical therapy.
- (b) Questionnaires were sent to thirty-nine of the county societies of the California Medical Association, each being asked to appoint a special committee to coöperate with the state society committee. In this way, interest and attention were directed toward physical therapy, not necessarily to increase its use, but to improve the quality of work. Of the thirty-nine county medical societies, five have created special committees on physical therapy; with two the matter is pending. The San Francisco County Medical Society has had an active functioning committee which recently made a survey of physical therapy in the hospitals in San Francisco County.
- (c) To fifty-one hospitals in California, questionnaires were sent and thirty-nine replied. In reply to the first question—Do you possess a physical therapy department?—thirty-five, or 89 per cent, answered yes, and four, or 11 per cent, answered no. To the second question—Is it under the control of a qualified physician?—thirty-five replied. Of these twenty-four, or 68 per cent, answered yes, and eleven, or 32 per cent, answered no. The committee offered its advisory services to all hospitals contemplating the establishment of a physical therapy department. The committee also suggested the presentation of papers at staff meetings in order to stimulate a better and more intelligent discussion of the value and limitations of physical therapy. Effort will be made to have manufacturers and distributors of physical therapy and x-ray equipment coöperate to discourage or do away with commercial lecture courses.
 - 2. Educational activities:

Papers, lectures, and films have been given and shown before medical societies and hospitals as follows:

Paper—"Physical Agents in the Treatment of Pneumonia."

An educational film on "Physical Therapy." This was shown three times, with explanatory comments.

A film on "Massage" was shown before the Western Hospital Association annual convention. Corrective exercise literature was supplied by the

^{*} A report submitted by a California Medical Association Committee on Physiotherapy, and read before the Council of the California Medical Association, Del Monte, April 25, 1933.

[†]The chairman and members of the committee wish to thank Dr. Richard Kovacs, chairman of the Committee on Physical Therapy of the New York County Medical Society, personally for his time and interest in furthering the work of the California committee.

Council on Physical Therapy of the American Medical Association.

Medical Association.

A paper on "Progress in Physical Therapy" was read before the industrial section at the annual meeting of the California Medical Association. An educational film was also shown.

RECOMMENDATIONS

The committee recommends a program for a half-day session on physical therapy at the next annual meeting of the California Medical Association. This is not to be regarded as a request for a special section, but as a method of spreading further information among general practitioners in order to get a more rational view of the indications and limitations of physical therapeutic measures. The committee hopes presently to be able to offer to the profession free instruction on courses in physical therapy. We will have available a list of accredited institutions which offer graduate and postgraduate instruction.

PLANS FOR THE FUTURE

At the 1933 Del Monte meeting of the California Medical Association, it was considered advisable to wait until fall before starting on an active educational campaign.

Our first step will be to again contact the medical societies which have not appointed committees, and to coöperate with such committees as have been appointed. Coöperation would include:

- 1. Making a more detailed survey of hospitals and institutions practicing physical therapy; under whose direction the work is being carried on; qualifications of technicians and physicians; equipment; and details of any graduate or post-graduate instruction given.
- 2. To promote the teaching of physical therapy to graduates and undergraduates in medical schools and hospitals; to make a survey of such schools and to ascertain in writing their curriculum requirements for admission, the number of students graduated each year and whether or not diplomas are given; and to secure the coöperation of manufacturers and distributors, in an effort to do away with commercial courses.
- 3. To ascertain the number of regular and irregular establishments offering some form of physical therapy treatment to the public, and under what authority they operate.
- 4. To encourage the presentation of papers on physical therapy subjects at meetings of state, county and city medical societies, and at hospital-staff meetings.
- 5. To see that physical therapy literature and books are obtainable in medical and hospital libraries, including such works as: "Handbook of Physical Therapy," published by the American Medical Association; "Principles and Practice of Physical Therapy," three volumes, loose-leaf set, edited by Doctors Pemberton, Mock, and Coulter, published by W. F. Pryor & Company; "Electrotherapy and Light Therapy," edited by Dr. Richard Kovacs, New York City, published by Lea & Febiger, Philadelphia, Pennsylvania; "Textbook of Physical Therapy" by Doctor Wolf, published by D. Appleton Century Company, Inc.; "Archives

of Physical Therapy, X-Ray, and Radium," a monthly publication, the cost of which is \$5 per year; address, 30 North Michigan Avenue, Chicago, Illinois.

Shortly after the appointment of the California State Committee, the Western Division of the American Physiotherapy Association, and Association of Technicians (including San Francisco, Los Angeles, Washington, and Oregon chapters) appointed contact representatives to act with the Committee on Physical Therapy of the California Medical Association. The sole purpose of this conjoint committee is to gather such information as organized medicine may call for at any time in relation to technicians of physiotherapy in the state.

It is a working committee, representing the entire Pacific Coast, and has seven members. These and similar groups, if there are any, should be a valuable asset to scientific physical therapy.

COMMENT

There are only two state committees in physical therapy in the whole United States—one on the eastern coast, the other on the Pacific Coast. How can physical therapy get adequate recognition unless more state committees are formed? It would aid greatly if at least one-half of the states had well organized, functioning committees. As soon as the medical profession understands that we are not merely trying to promote physical therapy, but are seeking to regulate its practice and turn the tide into legitimate channels, there should be no difficulty getting committees organized. Then on the day before each annual meeting of the various state medical societies, and while working in conjunction with the plan of the American Congress of Physical Therapy, we could have presented both constructive and instructive physical therapy programs.

REFLECTIONS CONCERNING NEUROPSYCHIATRY*

By Charles Lewis Allen, M.D.

Los Angeles

E are living in a time of the greatest scientific activity which the world has ever seen, and also in one of greatest uncertainty and unrest. The changed and changing views and attitudes of the people in all countries have not failed to profoundly affect medicine, notably neurology and psychiatry.

PSYCHOPATHIC REACTIONS TO MODERN CIVILIZATION

The social and political situations, and especially the influence of our mechanized civilization and crowding in large cities, with their hurry, excitements and dissipations, have proved intensely neuroticizing, as shown not only in actual nervous disease but also in the psychopathic reaction forms which complicate the picture in various illnesses.

^{*} Chairman's address, Neuropsychiatry Section of the California Medical Association at the sixty-second annual session at Del Monte, April 24-27, 1933.